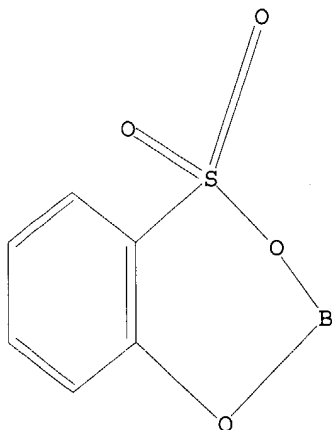


=> d
L10 HAS NO ANSWERS
L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l10

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 13:34:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 1 TO 80

L11 1 SEA SSS SAM L10

L12 1 L11

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.44	472.97

FILE 'REGISTRY' ENTERED AT 13:34:52 ON 26 MAY 2004
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STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6
DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s l10

SAMPLE SEARCH INITIATED 13:34:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 1 TO 80

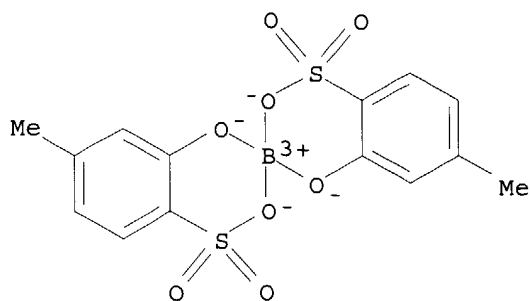
L13 1 SEA SSS SAM L10

=> d

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 146817-09-6 REGISTRY
CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-,
hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN 1-Butanamine, N,N-dibutyl-, (T-4)-bis[2-hydroxy-4-methylbenzenesulfonato(2-
)-O1,O2]borate(1-) (9CI)
MF C14 H12 B O8 S2 . C12 H27 N . H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: USES (Uses)

CM 1

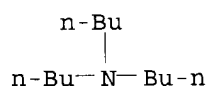
CRN 146817-08-5
CMF C14 H12 B O8 S2 . H
CCI CCS



● H⁺

CM 2

CRN 102-82-9
CMF C12 H27 N



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.19	475.16

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 13:35:06 ON 26 MAY 2004

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FILE COVERS 1907 - 26 May 2004 VOL 140 ISS 22
FILE LAST UPDATED: 25 May 2004 (20040525/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l11

L14 1 L11

=> d ibib abs hitstr

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:179996 CAPLUS

DOCUMENT NUMBER: 118:179996

TITLE: Image-forming method using toner containing boron

compound charge-controlling agent

INVENTOR(S): Hagiwara, Tomoe; Kuramoto, Shinichi; Orihara, Motoi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

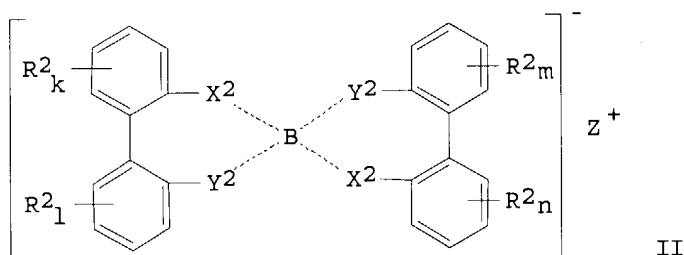
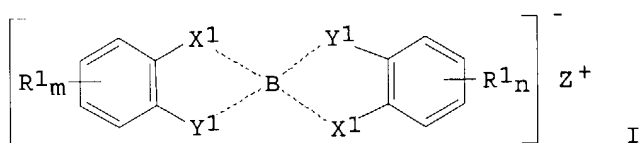
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04256963	A2	19920911	JP 1991-39420	19910208
PRIORITY APPLN. INFO.:			JP 1991-39420	19910208
OTHER SOURCE(S):		MARPAT 118:179996		

GI



AB In an image-forming method in which many elec. microfield are formed on a developer-carrying substance and the latent images are developed with a one-component type developer carried on the substance, which is prepared by optionally and externally adding adjuncts to a toner, the toner contains a binder resin, a coloring agent, and a B compound I and/or II [R1 = H, alkyl, alkoxy, halo, aromatic ring (including condensed ring); R2 = H, alkyl, alkoxy, halo; X1 = O, S, SO3, SO2NR3, NR3; X2 = CO2, CONR3, SO3, SO2NR3, O, S, NR3; Y1-2 = O, S, NR3 (R3 = H, alkyl); Z+ = cation; k, l, m, n = 1-4] as a charge-controlling agent. The method is able to form ≥ 2 toner layers uniformly and prevents toner-filming phenomena. Thus, styrene-acrylic copolymer, polypropylene, carbon black, and borodicatechol dimethylammonium were kneaded, pulverized, and mixed with colloidal silica to give a toner, which gave high d. images without fog in continuously repeated copying.

IT 146817-09-6

RL: USES (Uses)

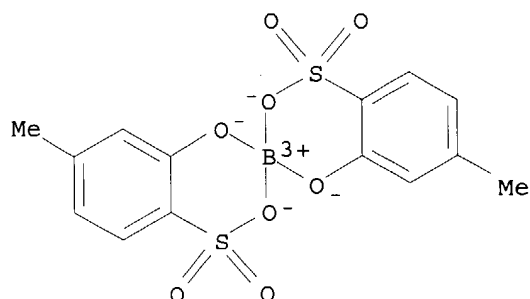
(charge-controlling agent, electrophotog. developer toner containing)

RN 146817-09-6 CAPLUS

CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

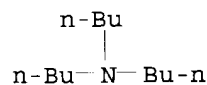
CRN 146817-08-5
CMF C14 H12 B O8 S2 . H
CCI CCS



● H⁺

CM 2

CRN 102-82-9
CMF C12 H27 N



=> sel rn
E1 THROUGH E8 ASSIGNED

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE	TOTAL
ENTRY	SESSION
5.28	480.44

SINCE FILE	TOTAL
ENTRY	SESSION
-0.69	-0.69

FILE 'REGISTRY' ENTERED AT 13:35:50 ON 26 MAY 2004
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STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6
DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s e1-e8

```
1 146817-07-4/BI
  (146817-07-4/RN)
1 146817-09-6/BI
  (146817-09-6/RN)
1 146817-11-0/BI
  (146817-11-0/RN)
1 146817-13-2/BI
  (146817-13-2/RN)
1 146817-15-4/BI
  (146817-15-4/RN)
1 146996-07-8/BI
  (146996-07-8/RN)
1 53992-90-8/BI
  (53992-90-8/RN)
1 53993-03-6/BI
  (53993-03-6/RN)
```

L15 8 (146817-07-4/BI OR 146817-09-6/BI OR 146817-11-0/BI OR 146817-13-2/BI OR 146817-15-4/BI OR 146996-07-8/BI OR 53992-90-8/BI OR 53993-03-6/BI)

=> s l15 and b/els

330098 B/ELS

L16 8 L15 AND B/ELS

=> s l16 and s/2ls

'2LS' IS NOT A VALID FIELD CODE

0 S/2LS

L17 0 L16 AND S/2LS

=> s l16 and s/els

5983159 S/ELS

L18 2 L16 AND S/ELS

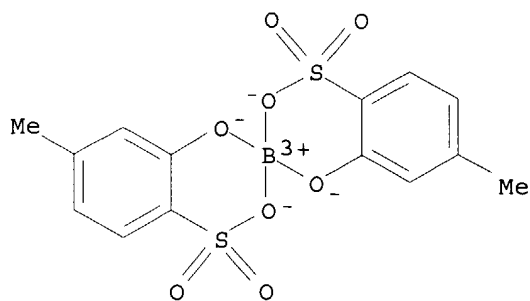
=> d scan

L18 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

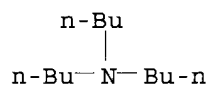
IN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-,
hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI)

MF C14 H12 B O8 S2 . C12 H27 N . H

CM 1



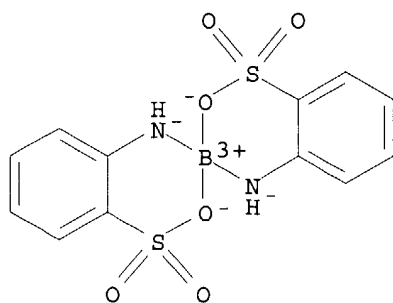
CM 2



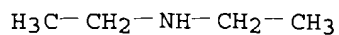
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L18 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN Borate(1-), bis[2-aminobenzenesulfonato(2-)-N,O]-, (T-4)-, hydrogen,
 compd. with N-ethylethanamine (1:1) (9CI)
 MF C12 H10 B N2 O6 S2 . C4 H11 N . H

CM 1



CM 2



ALL ANSWERS HAVE BEEN SCANNED

```
=> file reg
COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                9.28      489.72

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                0.00      -0.69
```

FILE 'REGISTRY' ENTERED AT 13:36:37 ON 26 MAY 2004
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STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6
 DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more
 information enter HELP PROP at an arrow prompt in the file or refer
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d his

(FILE 'HOME' ENTERED AT 13:27:54 ON 26 MAY 2004)

FILE 'CAPLUS' ENTERED AT 13:28:00 ON 26 MAY 2004

FILE 'REGISTRY' ENTERED AT 13:28:02 ON 26 MAY 2004

```
L1      STRUCTURE UPLOADED
L2      0 S L1
L3      0 S L1 FULL
L4      STRUCTURE UPLOADED
L5      0 S L4
L6      0 S L4 FULL
L7      STRUCTURE UPLOADED
L8      0 S L7
L9      1 S L7 FULL
```

FILE 'CAPLUS' ENTERED AT 13:32:14 ON 26 MAY 2004

```
L10     STRUCTURE UPLOADED
        S L10
```

FILE 'REGISTRY' ENTERED AT 13:34:47 ON 26 MAY 2004

```
L11     1 S L10
```

FILE 'CAPLUS' ENTERED AT 13:34:47 ON 26 MAY 2004

```
L12     1 S L11
```

FILE 'REGISTRY' ENTERED AT 13:34:52 ON 26 MAY 2004

```
L13     1 S L10
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FILE 'CAPLUS' ENTERED AT 13:35:06 ON 26 MAY 2004

L14 1 S L11
SEL RN

FILE 'REGISTRY' ENTERED AT 13:35:50 ON 26 MAY 2004

L15 8 S E1-E8
L16 8 S L15 AND B/ELS
L17 0 S L16 AND S/2LS
L18 2 S L16 AND S/ELS

FILE 'REGISTRY' ENTERED AT 13:36:37 ON 26 MAY 2004

=> s l10 full
FULL SEARCH INITIATED 13:36:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

L19 5 SEA SSS FUL L10

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	155.42	645.14
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.69

FILE 'CAPLUS' ENTERED AT 13:36:55 ON 26 MAY 2004
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FILE COVERS 1907 - 26 May 2004 VOL 140 ISS 22
FILE LAST UPDATED: 25 May 2004 (20040525/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l19
L20 8 L19

=> d ibib abs hitstr 1-8

L20 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:582287 CAPLUS
DOCUMENT NUMBER: 135:155240
TITLE: Inorganic gel-polymer electrolyte
INVENTOR(S): Ehrlich, Grant M.
PATENT ASSIGNEE(S): Yardney Technical Products, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.

6,203,949.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001012590	A1	20010809	US 2001-808794	20010315
US 6599664	B2	20030729		
US 6203949	B1	20010320	US 1998-137492	19980821

PRIORITY APPLN. INFO.:
US 1997-56740P P 19970822
US 1998-137492 A2 19980821

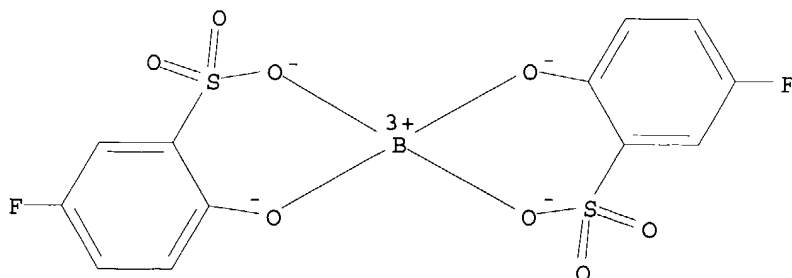
AB An anhydrous inorg. gel-polymer electrolyte is prepared using a nonaq. sol-gel process. The inorg. gel-polymer is prepared by reacting a metal halide (SiCl₄) and an alc. (tert-Bu alc.) in a diluent solution containing a lithium salt (lithium bisperfluoroethanesulfonimide) and at least one carbonate. The resulting porous silicon oxide network encapsulates the liquid electrolyte. The gel polymer electrolyte can serve as both a separator and an electrolyte in a Li-ion cell. The material is stable and has demonstrated minimal flammability. Lithium-ion electrochem. cells made with the inorg. gel-polymer electrolyte function similarly to Li-ion cells made with a liquid electrolyte. The cells have low capacity fade, 0.69%, and low irreversible capacity, 7.6%.

IT **201536-28-9**

RL: DEV (Device component use); USES (Uses)
(inorg. gel-polymer electrolyte for lithium secondary batteries)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy-κO)benzenesulfonato(2-)-κO]-, lithium, (T-4)-(9CI) (CA INDEX NAME)



● Li⁺

L20 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:195122 CAPLUS

DOCUMENT NUMBER: 134:210600

TITLE: Solid electrolyte for an electrochemical cell composed of an inorganic metal oxide network encapsulating a liquid electrolyte

INVENTOR(S): Ehrlich, Grant M.

PATENT ASSIGNEE(S): Yardney Technical Products, Inc., USA

SOURCE: U.S., 7 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6203949	B1	20010320	US 1998-137492	19980821
US 2001012590	A1	20010809	US 2001-808794	20010315
US 6599664	B2	20030729		
US 2001010881	A1	20010802	US 2001-810297	20010316
US 6558850	B2	20030506		

PRIORITY APPLN. INFO.:

US 1997-56740P P 19970822
US 1998-137492 A2 19980821

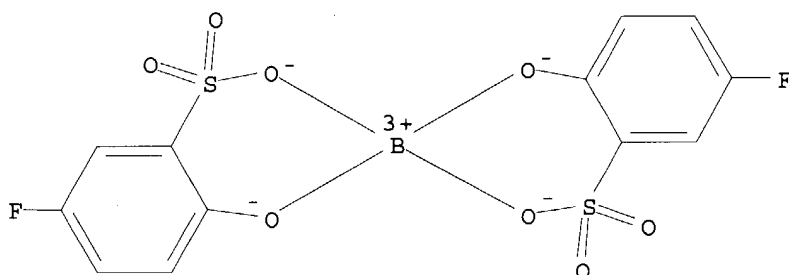
AB A solid polymer electrolyte for an electrochem. cell is prepared by a sol-gel process in which an active metal ion conducting liquid electrolyte, e.g. a lithium-ion electrolyte, containing a salt which is stable in the presence of water, e.g. lithium bisperfluoroethanesulfonimide, is admixed in aqueous solution with an alkoxide, e.g. silica alkoxide, to form a liquid precursor which is added to the electrochem. cell between the anode and cathode thereof and allowed to solidify in situ to form the solid electrolyte.

IT 201536-28-9

RL: DEV (Device component use); USES (Uses)
(solid electrolyte for electrochem. cell composed of inorg. metal oxide network encapsulating liquid electrolyte)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy-κO)benzenesulfonato(2-)-κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:28524 CAPLUS

DOCUMENT NUMBER: 134:94760

TITLE: Procedure for the production of lithium (olatobenzenesulfonato)borate complex salts and their use in electrochemical cells

INVENTOR(S): Schmidt, Michael; Demeijere, Armin; Leonov, Andrej

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

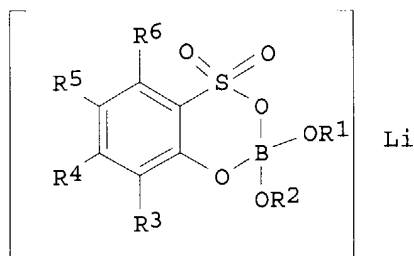
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19932317	A1	20010111	DE 1999-19932317	19990710

EP 1069128	A2	20010117	EP 2000-113144	20000629
EP 1069128	A3	20020619		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001055396	A2	20010227	JP 2000-203763	20000705
CN 1280130	A	20010117	CN 2000-120406	20000706
BR 2000002667	A	20010313	BR 2000-2667	20000710
US 6441216	B1	20020827	US 2000-613293	20000710
US 2003028023	A1	20030206	US 2002-191479	20020710
US 6657072	B2	20031202		
US 2004091785	A1	20040513	US 2003-697046	20031031
PRIORITY APPLN. INFO.:			DE 1999-19932317	A 19990710
			US 2000-613293	A3 20000710
			US 2002-191479	A3 20020710
OTHER SOURCE(S):			MARPAT 134:94760	
GI				



I

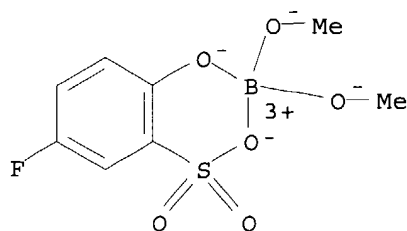
AB The invention concerns a procedure for the production of borate lithium complex salts I (R1, R2 = aryl, substituted aryl; R3-R6 = halo, C1-6 alkyl, alkoxy, aryl, etc.) and their application in electro-chemical cells. Thus, reaction of 5-fluoro-2-hydroxybenzenesulfonic acid with Me3SiCl gave 5-fluoro-2-trimethylsilyloxybenzenesulfonic acid trimethylsilyl ester which on treatment with lithium tetramethanolatoborate gave title compound, lithium bis[5-fluoro-2-olatobenzenesulfonato(2-)-O,O']borate(1-).

IT **316829-03-5P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and oxidation stability of)

RN 316829-03-5 CAPLUS

CN Borate(1-), [5-fluoro-3-(hydroxy-κO)benzenesulfonato(2-)-κO]dimethoxy-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li+

L20 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:645789 CAPLUS

DOCUMENT NUMBER: 133:225580

TITLE: Use of additives in electrolytes for improved performance of electrochemical cells

INVENTOR(S): Heider, Udo; Schmidt, Michael; Amann, Anja; Niemann, Marlies; Kuhner, Andreas

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1035612	A1	20000913	EP 2000-102355	20000204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19910968	A1	20001109	DE 1999-19910968	19990312
JP 2000268863	A2	20000929	JP 2000-41336	20000218
WO 2000055935	A1	20000921	WO 2000-EP1611	20000226
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000008938	A	20011218	BR 2000-8938	20000226
TW 522581	B	20030301	TW 2000-89104088	20000307
US 6548212	B1	20030415	US 2000-524922	20000313
US 2003228524	A1	20031211	US 2003-372084	20030225
PRIORITY APPLN. INFO.:			DE 1999-19910968 A	19990312
			WO 2000-EP1611 W	20000226
			US 2000-524922 A3	20000313

OTHER SOURCE(S): MARPAT 133:225580

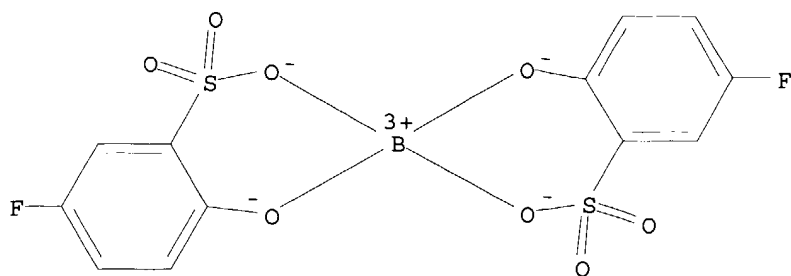
AB Battery electrolyte comprising an aprotic solvent with dissolved Li containing inorg. or organic salts from the group of methanides, triflates, and imides includes ≥ 1 O, eg. alkali metal salt additive. The additive is selected from the groups of organic alkali metal borate or alkali metal alcoholate.

IT **201536-28-9 227099-53-8**

RL: MOA (Modifier or additive use); USES (Uses)
(use of additives in electrolytes for improved performance of electrochem. cells)

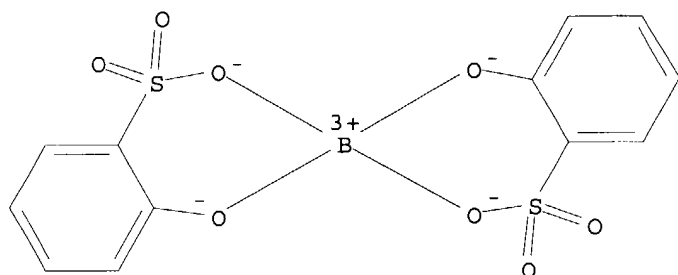
RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy- κ O)benzenesulfonato(2-)- κ O]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li⁺

RN 227099-53-8 CAPLUS
 CN Borate(1-), bis[2-(hydroxy-κO)benzenesulfonato-κO]-, lithium,
 (T-4) - (9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:384640 CAPLUS

DOCUMENT NUMBER: 133:20102

TITLE: Non-aqueous electrolyte secondary battery with
 improved anode and its charging method

INVENTOR(S): Iwamoto, Kazuya; Koshina, Hizuru; Shimamura, Harunari;
 Nitta, Yoshiaki

PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033403	A1	20000608	WO 1999-JP6689	19991130
W: US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2000173652	A2	20000623	JP 1998-342887	19981202
JP 2000173589	A2	20000623	JP 1998-342888	19981202
EP 1052714	A1	20001115	EP 1999-973177	19991130

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

PRIORITY APPLN. INFO.:

JP 1998-342887 A 19981202

JP 1998-342888 A 19981202

WO 1999-JP6689 W 19991130

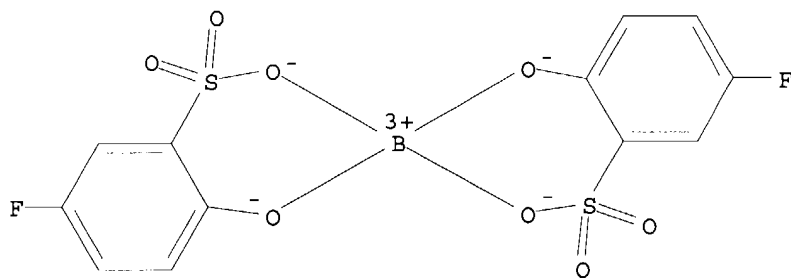
AB The nonaq. electrolyte secondary battery is characterized in that the neg. plate is made chiefly of composite particles of which at least part of the core particles containing ≥ 1 kind among Sn, Si, and Zn as a constituent element are coated with a solid solution or an intermetallic compound consisting of the constituent element constituting the core particles and ≥ 1 element selected from the group consisting of Group 2 elements of the periodic table except the constituent element, transition elements, Group 12 elements, Group 13 elements, and Group 14 elements except C and in that the nonaq. electrolyte is prepared by dissolving an organic acid anion Li salt into a highly nonoxidizable organic solvent. Therefore, gas is hardly produced even while the secondary cell is stored at high temps., and the secondary battery has a high energy d., excellent cycle life characteristics, and excellent high-rate charging/discharging characteristics.

IT 201536-28-9

RL: DEV (Device component use); NUU (Other use, unclassified); USES (Uses) (non-aqueous electrolyte secondary battery with improved anode and charging method)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy- κ O)benzenesulfonato(2-)- κ O]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:409584 CAPLUS

DOCUMENT NUMBER: 131:47168

TITLE: Nonaqueous electrolyte compositions

INVENTOR(S): Heider, Udo; Wenige, Roger; Pohl, Ludwig; Niemann, Marlies; Jungnitz, Michael

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19757126	A1	19990624	DE 1997-19757126	19971220

PRIORITY APPLN. INFO.:

DE 1997-19757126

19971220

OTHER SOURCE(S): MARPAT 131:47168

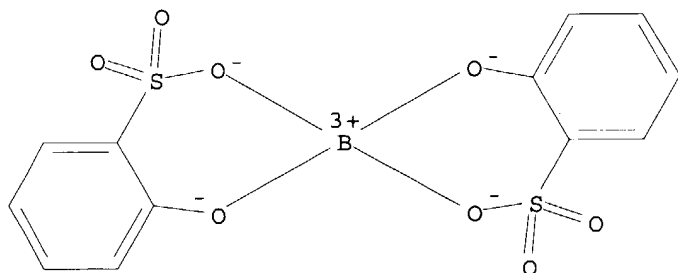
AB Nonaq. electrolyte compns. comprise ≥ 1 conductor compound dissolved in a mixture of ≥ 2 nonaq. solvents. The composition of the electrolyte lies in the range of +10 mol% to -10 mol% of eutectic electrolyte composition. The electrolyte is suitable for primary or secondary batteries, a condenser, or a galvanic cell.

IT **227099-53-8**

RL: DEV (Device component use); USES (Uses)
(nonaq. electrolyte compns.)

RN 227099-53-8 CAPLUS

CN Borate(1-), bis[2-(hydroxy- κ O)benzenesulfonato- κ O]-, lithium,
(T-4)- (9CI) (CA INDEX NAME)



● Li⁺

L20 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:95377 CAPLUS

DOCUMENT NUMBER: 128:117272

TITLE: Lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-), a new anodically and cathodically stable salt for electrolytes of lithium-ion cells

AUTHOR(S): Barthel, J.; Schmidt, M.; Gores, H. J.

CORPORATE SOURCE: Inst. Theoretische & Physikalische Chemie, Univ. Regensburg, Regensburg, D-93040, Germany

SOURCE: Journal of the Electrochemical Society (1998), 145(2), L17-L20

CODEN: JESQAN; ISSN: 0013-4651

PUBLISHER: Electrochemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Synthesis, characterization, and electrochem. investigations of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O'] borate, a new salt for lithium-ion batteries in ethylene carbonate (EC)-di-Me carbonate (DMC) mixts. are presented. At platinum electrodes the anodic oxidation limit is .apprx.4.6 V, a value which is in good agreement with an estimation based on semiempirical quantum-mech. calcns. At aluminum electrodes its behavior is similar to that obtained for LiPF₆/EC-DMC (1:1).

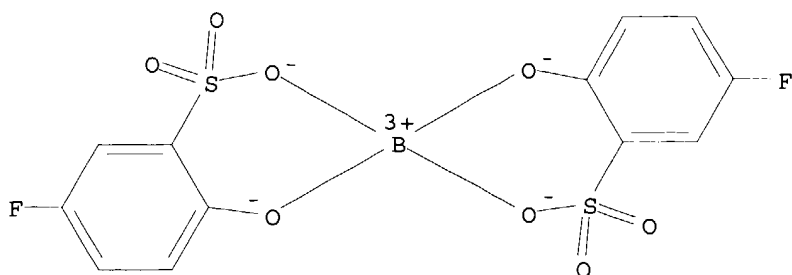
IT **201536-28-9P**

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(synthesis, characterization, and electrochem. investigations of anodically and cathodically stable salt of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-) for electrolytes of lithium-ion batteries)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy- κ O)benzenesulfonato(2-)- κ O]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:179996 CAPLUS

DOCUMENT NUMBER: 118:179996

TITLE: Image-forming method using toner containing boron compound charge-controlling agent

INVENTOR(S): Hagiwara, Tomoe; Kuramoto, Shinichi; Orihara, Motoi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

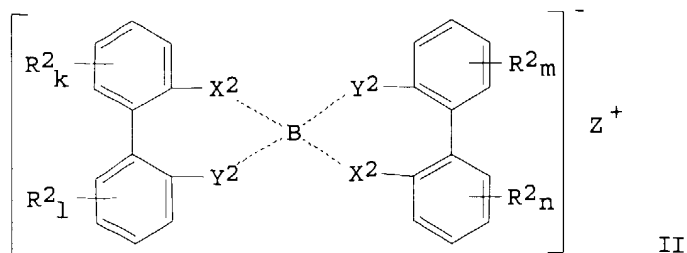
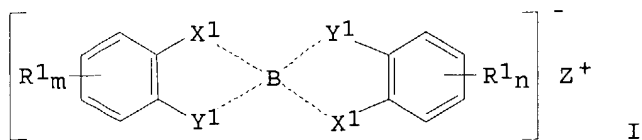
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04256963	A2	19920911	JP 1991-39420	19910208
PRIORITY APPLN. INFO.:			JP 1991-39420	19910208
OTHER SOURCE(S):			MARPAT 118:179996	

GI



AB In an image-forming method in which many elec. microfield are formed on a developer-carrying substance and the latent images are developed with a

one-component type developer carried on the substance, which is prepared by optionally and externally adding adjuncts to a toner, the toner contains a binder resin, a coloring agent, and a B compound I and/or II [R1 = H, alkyl, alkoxy, halo, aromatic ring (including condensed ring); R2 = H, alkyl, alkoxy, halo; X1 = O, S, SO3, SO2NR3, NR3; X2 = CO2, CONR3, SO3, SO2NR3, O, S, NR3; Y1-2 = O, S, NR3 (R3 = H, alkyl); Z+ = cation; k, l, m, n = 1-4] as a charge-controlling agent. The method is able to form ≥ 2 toner layers uniformly and prevents toner-filming phenomena. Thus, styrene-acrylic copolymer, polypropylene, carbon black, and borodicatechol dimethylammonium were kneaded, pulverized, and mixed with colloidal silica to give a toner, which gave high d. images without fog in continuously repeated copying.

IT 146817-09-6

RL: USES (Uses)

(charge-controlling agent, electrophotog. developer toner containing)

RN 146817-09-6 CAPLUS

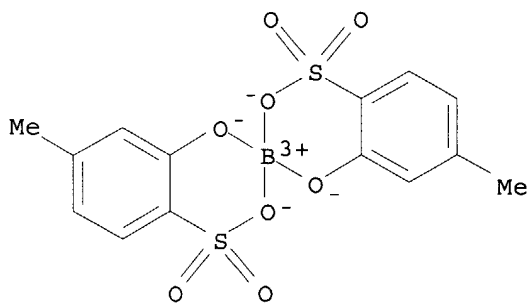
CN Borate(1-), bis[2-hydroxy-4-methylbenzenesulfonato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with N,N-dibutyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 146817-08-5

CMF C14 H12 B O8 S2 . H

CCI CCS

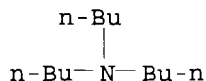


● H⁺

CM 2

CRN 102-82-9

CMF C12 H27 N



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Executing the logoff script...

ACCESSION NUMBER: 2000:384640 CAPLUS
 DOCUMENT NUMBER: 133:20102
 TITLE: Non-aqueous electrolyte secondary battery with improved anode and its charging method
 INVENTOR(S): Iwamoto, Kazuya; Koshina, Hizuru; Shimamura, Harunari; Nitta, Yoshiaki
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033403	A1	20000608	WO 1999-JP6689	19991130
W: US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2000173652	A2	20000623	JP 1998-342887	19981202
JP 2000173589	A2	20000623	JP 1998-342888	19981202
EP 1052714	A1	20001115	EP 1999-973177	19991130
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: JP 1998-342887 A 19981202
 JP 1998-342888 A 19981202
 WO 1999-JP6689 W 19991130

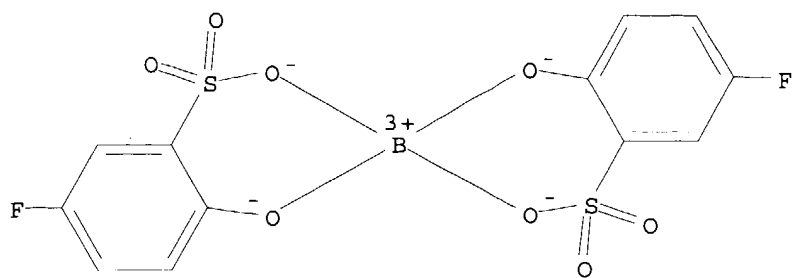
AB The nonaq. electrolyte secondary battery is characterized in that the neg. plate is made chiefly of composite particles of which at least part of the core particles containing ≥ 1 kind among Sn, Si, and Zn as a constituent element are coated with a solid solution or an intermetallic compound consisting of the constituent element constituting the core particles and ≥ 1 element selected from the group consisting of Group 2 elements of the periodic table except the constituent element, transition elements, Group 12 elements, Group 13 elements, and Group 14 elements except C and in that the nonaq. electrolyte is prepared by dissolving an organic acid anion Li salt into a highly nonoxidizable organic solvent. Therefore, gas is hardly produced even while the secondary cell is stored at high temps., and the secondary battery has a high energy d., excellent cycle life characteristics, and excellent high-rate charging/discharging characteristics.

IT 201536-28-9

RL: DEV (Device component use); NUU (Other use, unclassified); USES (Uses)
 (non-aqueous electrolyte secondary battery with improved anode and charging method)

RN 201536-28-9 CAPLUS

CN Borate(1-), bis[5-fluoro-2-(hydroxy- κ O)benzenesulfonato(2-)- κ O]-, lithium, (T-4)- (9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1999:409584 CAPLUS
 DOCUMENT NUMBER: 131:47168
 TITLE: Nonaqueous electrolyte compositions
 INVENTOR(S): Heider, Udo; Wenige, Roger; Pohl, Ludwig; Niemann, Marlies; Jungnitz, Michael
 PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
 SOURCE: Ger. Offen., 6 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

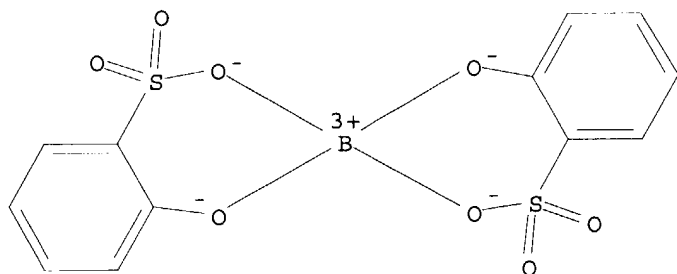
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19757126	A1	19990624	DE 1997-19757126	19971220
PRIORITY APPLN. INFO.:			DE 1997-19757126	19971220
OTHER SOURCE(S):			MARPAT 131:47168	

AB Nonaq. electrolyte compns. comprise ≥ 1 conductor compound dissolved in a mixture of ≥ 2 nonaq. solvents. The composition of the electrolyte lies in the range of +10 mol% to -10 mol% of eutectic electrolyte composition. The electrolyte is suitable for primary or secondary batteries, a condenser, or a galvanic cell.

IT **227099-53-8**
 RL: DEV (Device component use); USES (Uses)
 (nonaq. electrolyte compns.)

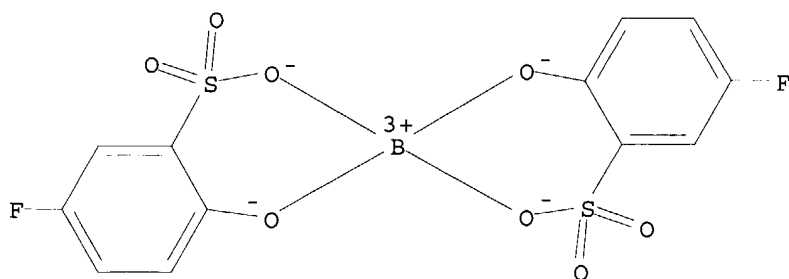
RN 227099-53-8 CAPLUS

CN Borate(1-), bis[2-(hydroxy- κ O)benzenesulfonato- κ O]-, lithium,
 (T-4) - (9CI) (CA INDEX NAME)



● Li⁺

ACCESSION NUMBER: 1998:95377 CAPLUS
 DOCUMENT NUMBER: 128:117272
 TITLE: Lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-), a new anodically and cathodically stable salt for electrolytes of lithium-ion cells
 AUTHOR(S): Barthel, J.; Schmidt, M.; Gores, H. J.
 CORPORATE SOURCE: Inst. Theoretische & Physikalische Chemie, Univ. Regensburg, Regensburg, D-93040, Germany
 SOURCE: Journal of the Electrochemical Society (1998), 145(2), L17-L20
 CODEN: JESOA; ISSN: 0013-4651
 PUBLISHER: Electrochemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Synthesis, characterization, and electrochem. investigations of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O'] borate, a new salt for lithium-ion batteries in ethylene carbonate (EC)-di-Me carbonate (DMC) mixts. are presented. At platinum electrodes the anodic oxidation limit is .apprx.4.6 V, a value which is in good agreement with an estimation based on semiempirical quantum-mech. calcns. At aluminum electrodes its behavior is similar to that obtained for LiPF₆/EC-DMC (1:1).
 IT **201536-28-9P**
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (synthesis, characterization, and electrochem. investigations of anodically and cathodically stable salt of lithium bis[5-fluoro-2-olato-1-benzenesulfonato(2-)-O,O']borate(1-) for electrolytes of lithium-ion batteries)
 RN 201536-28-9 CAPLUS
 CN Borate(1-), bis[5-fluoro-2-(hydroxy-κO)benzenesulfonato(2-)-κO]-, lithium, (T-4)-(9CI) (CA INDEX NAME)



● Li⁺

REFERENCE COUNT: 12
 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT